

CLAIMS

1. A method for creating a banking information management system comprising the steps of:

5 evaluating the data processing needs of a plurality of business units in a bank wherein said evaluation comprises identification of:

data to be processed;

algorithms to be applied to said data;

inputs to be received from the banking unit;

10 data products to be used internally within the banking unit;

data products that must be delivered to other banking units; and

data products that must be delivered to other entities outside of the bank;

15 segregating the data processing needs of each of the plurality of business units in the bank into a plurality of functional modules;

defining the behavior of each of said functional modules; and

defining the interaction of each of said functional modules with other said functional modules.

20 2. The method of Claim 1 further comprising the step of

categorizing each of said functional modules as either a client or as an object used by any one client.

25 3. The method of Claim 2 further comprising the steps of:

initiating a plurality of client applications each of which is an autonomous process that interacts either with a human user or another client process; initiating an object request broker or event that:

receives a request for service from one of the plurality of client applications;

30 identifies an object that can support the service request;

policies the form of the client request to ensure it is compatible with the form required by said identified object;

initiates a new instance of the identified object; and

creates a communications channel between the client requesting service and the identified object;

35 allowing the object identified by the object request broker or event to receive the service request from the client using said communications channel; and

allowing the client to receive the results from the object using said communications channel.

4. The method of Claim 3 wherein said object request broker or event is hosted on a computer accessible to the client by means of a computer network.
5. The method of Claim 3 wherein the object request broker or event initiates a new instance of the identified object on a computer accessible to the client by means of a computer network.
- 10 6. The method of Claim 3 wherein the object request broker or event is compliant with the common object request broker architecture and middleware event management standards.
- 15 7. The method of Claim 2 further comprising the step of associating a name with each of said functional modules that are categorized as objects.
8. The method of Claim 2 further comprising the step of defining an event service level for each of said functional modules that are categorized as objects.
- 20 9. The method of Claim 8 wherein the event service level is one of the following: synchronous call, deferred call, or asynchronous message based.
- 25 10. The method of Claim 2 further comprising the step of defining the life cycle for each of said functional modules that are categorized as objects.
11. The method of Claim 10 wherein the life cycle is defined by a first variable that can take one of the following states: persistent; or temporal; and a second variable that can take on one of the following states: transient; or resident.
- 30 12. The method of Claim 2 further comprising the step of defining the concurrency requirements for each of said functional modules that are categorized as objects.
- 35 13. The method of Claim 2 further comprising the step of defining the relationship structure for each of said functional modules that are categorized as objects.

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14. The method of Claim 2 further comprising the step of defining the externalization structure for each of said functional modules that are categorized as objects.
- 5 15. The method of Claim 1 wherein the definition of the behavior of each of said functional modules comprises an object definition compliant with an object request broker or OMG JZEE standard.
- 10 16. The method of Claim 1 wherein the definition of the interaction of each of said function modules comprises an interface definition compliant with an object request broker or OMG JZEE standard.
- 15 17. The method of Claim 2 further comprising the steps of:
identifying those functional modules categorized as clients that have a direct interaction with a human user; and
defining a man machine interface for each of said clients.
- 20 18. The method of Claim 17 wherein the functional modules categorized as clients that have a direct interaction with a human user are hosted on a personal workstation that is used by a bank teller.
- 25 19. The method of Claim 17 wherein the functional modules categorized as clients that have a direct interaction with a human user are hosted on a personal digital assistant.
20. The method of Claim 17 wherein the functional modules categorized as clients that have a direct interaction with a human user are hosted on an automated teller machine.
- 30 21. A banking information management system comprising:
plurality of business objects;
object request broker; JZEE; and standard XML message sets;
plurality of client applications;
- 35 22. The system of Claim 21 wherein the business objects comprise:
methods that define the business rules for a bank business unit;
databases that contain the information upon which said methods act; and
interface definitions that define how clients request said objects to render service.

23. The system of Claim 22 wherein the methods that define business rules are compatible with an object request broker, JZEE and standard XML message sets..

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24. The system of Claim 22 wherein the interface definitions are compatible with an object request broker JZEE and standard message sets.

10 25. The system of Claim 22 wherein the interface definitions are authored in an interface description language.

26. The system of Claim 21 wherein the object request broker JZEE or event management common infrastructure layers:

15 receives request for service from one of a plurality of client applications;
identifies an object that can service said service request;
ensures that said service request conforms to the interface of said identified object;
invokes a new instance of said identified object;
creates a communications channel between the client application requesting service and said new instance of said identified object;
propagates said service request to said new instance of said identified object using said communications channel; and
receives results from said new instance of said identified object and directs said results to the requesting client application using said communications channel.

20 27. The system of Claim 26 wherein the object request broker or event initiates a said new instance of said identified object on a computer accessible to said requesting client application using a computer network.

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28. The system of Claim 26 wherein the object request broker or event propagates a service request using a plurality of service levels.

30 29. The system of Claim 28 wherein the said plurality of service levels is one of the following: synchronous call; deferred call; or asynchronous message based.

35 30. The system of Claim 26 wherein the object request broker or event invokes said instance of said identified object using a variable life cycle.

31. The system of Claim 30 wherein the variable life cycle can be one of the following four types: persistent and resident; persistent but transient; temporal but resident; or temporal and transient.
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32. The system of Claim 21 wherein the object request broker or event is hosted on a computer that is accessible to client applications using a computer network.
- 10 33. The system of Claim 21 wherein the object request broker or event is compliant with the common object request broker architecture specification, JZEE and standard messaging sets.
- 15 34. The system of Claim 21 wherein the object request broker, JZEE, or event associates a name with each of the plurality of objects.
35. The system of Claim 21 wherein the client application comprises:
Inbound interface unit that receives a information request from either another client or a human user;
- 20 object service request unit that formulates a service request based on said information request and delivers said service request to the object request broker or event management layer;
logic unit that receives the results from said service request from said object request broker or event management layer within the common infrastructure; and
- 25 outbound interface unit that conveys said results to either another client process or a human user.